AMENDMENTS

In the Claims:

Please amend Claims as follows:

Please cancel claims 1-3, 6, 8, 10-14, 16-19, 21, 23, 25-27 and 37-39.

Please add the following new claims:

40. (New) An isolated nucleic acid molecule selected from the group consisting of:

- (a) a nucleic acid molecule having a nucleic acid sequence that is at least about 95 percent identical over the full length to a nucleic acid sequence selected from the group consisting of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30, and SEQ ID NO:33, wherein the isolated nucleic acid molecule encodes a protein that elicits an immune response against a naturally-occurring canine or feline B7-2 protein or stimulates T cell proliferation; and
 - (b) a nucleic acid molecule complementary to the nucleic acid molecule of (a).
 - (New) An isolated nucleic acid molecule selected from the group consisting of:
- (a) a nucleic acid molecule that encodes a naturally-occurring soluble canine or feline B7-2 protein; and
- (b) a nucleic acid molecule complementary to the nucleic acid molecule of (a).
- 42. (New) The isolated nucleic acid of Claim 40, wherein said nucleic acid molecule is selected from the group consisting of:
- (a) SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30, SEQ ID NO:33; and
- (b) a nucleic acid molecule complementary to the nucleic acid molecule of (a).
- 43. (New) The isolated nucleic acid of Claim 41, wherein said nucleic acid molecule is selected from the group consisting of:
 - (a) SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33; and.

- (b) a nucleic acid molecule complementary to the nucleic acid molecule of (a)
- (New) An isolated nucleic acid selected from the group consisting of a nucleic acid molecule having a nucleic acid sequence encoding a B7-2 protein that is at least about 95 percent identical to over the full length of an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34, wherein said B7 protein elicits an immune response against a naturally-occurring canine or feline B7-2 protein or stimulates T cell proliferation.
- 45. (New) The isolated nucleic acid molecule of Claim 44, wherein said amino acid sequence is selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.
- 46. (New) An isolated nucleic acid molecule comprising an allelic variant of the nucleic acid molecule of Claims 40-45, wherein said variant nucleic acid molecule encodes a protein that elicits an immune response against a naturally-occurring canine or feline B7-2 protein or stimulates T cell proliferation.
- (New) An isolated nucleic acid molecule consisting of a fragment of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 or SEQ ID NO:33, wherein said fragment is at least about 12 nucleotides of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 or SEQ ID NO:33.
- (New) An isolated nucleic acid molecule consisting of a fragment of a nucleic acid molecule encoding a canine or feline B7-2 protein, wherein said protein has an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34, and wherein said fragment is at least about 12 nucleotides.
- 49. (New) The isolated nucleic acid molecule of Claims 47 or 48, wherein said fragment has at least about 18 nucleotides.

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- 50. (New) A composition comprising the isolated nucleic acid molecule of Claims 40-49 and an expient.
- (New) A method to produce a canine or feline B7-2 protein, said method comprising culturing a cell capable of expressing said B7-2 protein, said B7-2 protein being encoded by a nucleic acid molecule selected from the group consisting of:
- (a) a nucleic acid molecule having a nucleic acid sequence that is at least about 95 percent identical over the full length to a nucleic acid sequence selected from the group consisting of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30, and SEQ ID NO:33; and
- (b) a nucleic acid molecule that encodes a naturally-occurring soluble canine or feline B7-2 protein.
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- 52. (New) The method of Claim 51, wherein said nucleic acid molecule encodes a B7-2 protein that is at least about 95 percent identical over the full length of an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.
- 53. (New) The method of Claim 50, wherein said nucleic acid molecule is selected from the group consisting of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33.
- 54. (New) The method of Claim 50, wherein said nucleic acid molecule comprises a nucleic acid sequence that encodes a protein having an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.
- 55. (New) The method of Claim 50, wherein the nucleic acid molecule comprises an allelic variant of the nucleic acid molecule of Claims 40-49, wherein said nucleic acid molecule encodes a protein that elicits an immune response against a naturally-occurring canine or feline B7-2 protein or stimulates T cell proliferation.

- 56. (New) A method to produce a canine or feline B7-2 peptide, said method comprising culturing a cell capable of expressing said B7-2 peptide, said B7-2 peptide being encoded by a nucleic acid molecule consisting of a fragment of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 or SEQ ID NO:33, wherein said fragment is at least about 12 nucleotides of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:16, SEQ ID NO:19, SEQ ID NO:25, SEQ ID NO:28, SEQ ID NO:30 or SEQ ID NO:33...
- 57. (New) The method of Claim 56, wherein said fragment is at least about 12 nucleotides.
- 58. (New) The method of Claim 56, wherein said fragment is at least about 18 nucleotides.
- 59. (New) A recombinant molecule comprising a nucleic acid molecule as set forth in Claims 40-49 operatively linked to a transcription control sequence.
- 60. (New) A recombinant virus comprising a nucleic acid molecule as set forth in Claims 40-49.
- 61. (New) A recombinant cell comprising a nucleic acid molecule as set forth in Claims 40-49.